

Remarks

Drawings

The drawings are objected to under 37 C.F.R. 1.83(a) for not showing an obtuse angle. Submitted herewith is a replacement drawing sheet in compliance with 37 C.F.R. 1.121(d). The replacement drawing sheet more clearly identifies an angle α in Figure 3. The specification refers to an obtuse angle in Figure 3. As the angle is identified in Figure 3, the drawings are in compliance.

Claims

Claims 1-8 are pending in the application. The claims stand objected to and rejected under 35 U.S.C. § 112 and 103.

Claim 1 stands objected to due to informalities. Claim 1 is amended herein for clarification.

Section 112

Claims 1 through 8 are objected to under 35 U.S.C. § 112 as being indefinite. Claim 1 recites "an angle formed between lines through a central axis of the first eccentric shaft, a central axis of the driving gear and a central axis of the second eccentric shaft is obtuse." Claim 5 recites "an angle formed between lines through a central axis of the first elongate shaft, a central axis of the rotary driving gear and a central axis of the second elongate shaft is obtuse." The Office Action queries as to how the lines are interconnected and between which lines is the obtuse angle created.

Figure 3 illustrates the obtuse angle α . The obtuse angle is formed by three points which the Office Action itself correctly identifies on page 3, paragraph 5: axel

center of a first eccentric shaft 5, an axel center of driving gear 7, and an axel center of a second eccentric shaft 8. The central axis of the driving gear shaft 17 corresponds to the axel center (or central axis) of the driving gear 7. The specification recites, “[a]s illustrated in Fig.3, an angle formed between lines through the central axis of the first eccentric shaft [5], the central axis of the driving gear [7] and the central axis of the second eccentric shaft [8] is obtuse.” Page 3, paragraph [0016]. The claim language is similar to that recited in the specification.

Thus, a first line is formed between the first eccentric shaft and the central axis of the driving gear. A second line is formed between the central axis of the driving gear and the central axis of the second eccentric shaft. The central axis of the driving gear serves as the common point. Two lines are formed, and it is between these two lines that an obtuse angle α is defined. The Applicant believes that the claim language is definite and respectfully requests reconsideration.

Section 103

Claims 1-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,785,053 to Michaelson (“Michaelson”) in view of DE 3643279 to Fuchs (“Fuchs”).

A key feature of the present invention is the fact that the angle formed between lines through a central axis of the first eccentric shaft, a central axis of the driving gear, and a central axis of the second eccentric shaft is obtuse. This arrangement enhances the efficiency of the saw blade by virtue of the fact that the reciprocating motion of the plunger caused by the link member and the rocking action of the plunger caused by the pushing member are in different phases thereby

causing the saw blade to move in an elliptical path. The elliptical path makes the cutting action of the saw blade have an increased rocking motion to assist cutting and makes the return action of the saw blade have a decreased rocking action to save energy.

Claim 1 recites “an angle formed between lines through a central axis of the first eccentric shaft, a central axis of the driving gear and a central axis of the second eccentric shaft is obtuse.” Michaelson does not teach or suggest this claim limitation. For this limitation, the Office Action cites to Figure 2 of Fuchs. However, Figure 2 of Fuchs does not disclose the cited claim limitation.

Fuchs teaches that when the plunger 14 implements a working stroke of $2(r + e)$ in a counter-clockwise rotation of the rotating motor, the angle formed between the central axis 12' of the first eccentric shaft 12, the central axis 8 of the driving gear 1 and the central axis 9 of the second eccentric shaft is zero. When the plunger 14 implements a working stroke of $2(r - e)$ in the clockwise rotation of the driving motor, the angle formed between the central axis 12' of the first eccentric shaft 12, the central axis 8 of the driving gear 1 and the central axis 9 of the second eccentric shaft is 180°. The path of the saw blade is linear. Quite simply, Fuchs has absolutely no teaching or suggestion of an obtuse angle formed between lines through the central axis of the first eccentric shaft, the central axis of the driving gear, and the central axis of the second eccentric shaft.

The Patent and Trademark Office has the burden to establish a prima facie case of obviousness. MPEP § 2142; In re Fine, 837 F.2d, 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To establish prima facie obviousness of a claimed

invention, all the claim limitations must be taught or suggested by the prior art. MPEP § 2143.03; In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The limitation of an obtuse angle formed between lines through the central axis of the first eccentric shaft, the central axis of the driving gear, and the central axis of the second eccentric shaft is not found in Michaelson, Fuchs, or in their combination. Accordingly, claim 1 represents patentable subject matter.

The Applicant further submits that the combination of Michaelson and Fuchs is based on impermissible hindsight analysis of the invention and does not reflect what one of ordinary skill in the art would have considered. It is well settled that hindsight is not a proper basis for rejecting claims. Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc. 30 U.S.P.Q.2d 1377 (Fed. Cir. 1993). "The motivation to combine references cannot come from the invention itself" but must instead come from the prior art. Id.

The Office Action states that it would have been obvious to have modified Michaelson's saw by introducing no less than seven features from Fuchs. This requires one of ordinary skill in the art to have selected from Fuchs a first eccentric shaft, a pushing member, a lifting member, a sleeve bearing, and an obtuse angle specifically formed by recited position of the elements. The Office Action "cherry picks" features from Michaelson and Fuchs with a disregard of the functional inter-relationship of these features as they were recited in claim 1.

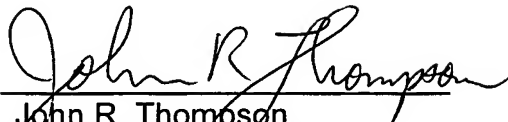
Any attempt to modify Michaelson's saw in the suggested manner would not have been contemplated by one of ordinary skill in the art and would not have been technically feasible. Indeed, any arrangement for introducing a rocking motion into Michaelson's saw would have confounded the express object of Michaelson, which is to provide a dual saber and jig saw. Michaelson has no teaching, suggestion, or motivation whatsoever of any arrangement for introducing a rocking motion let alone the specific arrangement of claim 1. The rocking motion requires the arrangement of a second eccentric shaft, a pushing member, and a lifting member.

"[I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. . . . This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'" In re Fritch, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). The Applicant submits that Michaelson and Fuchs are not properly combined, as the rocking motion is contrary to the purpose of Michaelson, there is a no motivation in the cited references to combine, and the combination is based on hindsight analysis. Reconsideration is respectfully requested.

Claims 2-4 depend from claim 1 and represent patentable subject for at least the reasons discussed above.

In view of the foregoing, all pending claims represent patentable subject matter. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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